

CALIFORNIA WILDLIFE HABITAT RELATIONSHIPS SYSTEM
maintained by the
CALIFORNIA DEPARTMENT OF FISH AND GAME
and supported by the
CALIFORNIA INTERAGENCY WILDLIFE TASK GROUP
Database Version 8.1 (2005)

B274 Northern Saw-whet Owl *Aegolius acadicus*
Family: Strigidae Order: Strigiformes Class: Aves

Written by: C. Polite
Reviewed by: L. Kiff, D. Airola
Edited by: L. Kiff

DISTRIBUTION, ABUNDANCE, AND SEASONALITY

An uncommon to common resident found in many stages of most forest habitats, from sea level to the red fir zone. Common in mature riparian and oak habitats with intermediate canopy closure. Occurs through most of the state, excluding the southeastern desert regions. Breeding range includes Santa Catalina Island. Apparently much rarer in southern California (Garrett and Dunn 1981).

SPECIFIC HABITAT REQUIREMENTS

Feeding: Eats mostly woodland mice and other small mammals; also a few birds and arthropods; rarely amphibians. Perches and pounces on prey on ground; also hawks.

Cover: Roosts perched, or in a tree cavity, usually within a snag, in broken forest habitats.

Reproduction: Nests in tree and snag cavities and woodpecker holes (especially flicker). Nest usually 1.5 to 15 m (5-50 ft) above ground. Nest may be lined with moss, leaves, bark, or feathers; often no lining. Conifers preferred, but hardwood snags used also (Karalus and Eckert 1974).

Water: No data found.

Pattern: Frequents forest and herbaceous edges.

SPECIES LIFE HISTORY

Activity Patterns: Yearlong, nocturnal activity.

Seasonal Movements/Migration: Makes altitudinal movements in response to weather conditions.

Home Range: In Minnesota, an individual was observed using 112 ha (280 ac) in fall, 31 ha (76 ac) of which was used only sparingly (Forbes and Warner 1974). Wintering individuals ranged over approximately 40 ha (100 ac) (Mumford and Zusi 1958).

Territory: No data found.

Reproduction: Breeds from early March through August. Clutch size 3-7; mean of 5.6. Eggs laid at 1-3 day intervals in April and May; incubated 21-28 days. Semialtricial young fledge at about 30 days.

Niche: Predators include great horned owls, great gray owls, spotted owls, and other large

owls. Long-tailed weasels and tree squirrels may take eggs and young. Competitors include screech owls and pygmy-owls.

REFERENCES

- Bent, A. C. 1938. Life histories of North American birds of prey. Part 2. U.S. Natl. Mus. Bull. 170. 482pp.
- Bertrand, G. A., and J. M. Scott. 1979. Checklist of the birds of Oregon. Audubon Soc. of Corvallis. Corvallis OR. 17pp.
- Ehrlich, P. R., D. S. Dobkin, and D. Wheye. 1988. The birder's handbook. Simon and Schuster, New York. 785pp.
- Forbes, J. E., and D. W. Warner. 1974. Behavior of a radio-tagged saw-whet owl. Auk 91:783-795.
- Garrett, K., and J. Dunn. 1981. Birds of southern California. Los Angeles Audubon Soc. 408pp.
- Grinnell, J., and A. H. Miller. 1944. The distribution of the birds of California. Pac. Coast Avifauna No. 27. 608pp.
- Guiguet, C. J. 1960. The Birds of British Columbia (7). The owls. Brit. Col. Prov. Mus., Vancouver. Handb. No. 18. 62pp.
- Johnson, R. E., and W. E. Grenfell. 1979. Winter food habits of a saw-whet owl in California's Central Valley. Calif. Dep. Fish and Game, Sacramento. Wildl. Manage. Branch Prog. Rep. Wildl. Investig. Lab. W52R-23, Job II. 2pp.
- Karalus, K. E., and A. W. Eckert. 1974. The owls of North America. Doubleday Co., Garden City NY. 278pp.
- Mumford, R. E., and R. L. Zusi. 1958. Notes on movements, territory, and habitat of wintering saw-whet owls. Wilson Bull. 70:188-191.
- Randle, W., and R. Austing. 1952. Ecological notes on long eared and saw-whet owls in southwestern Ohio. Ecology 33:422-426.
- Scott, V. E., K. E. Evans, D. R. Patton, C. P. Stone, and A. Singer. 1977. Cavity-nesting birds of North American forests. U.S. Dep. Agric., For. Serv., Wash. DC. Agric. Handb. No. 511. 112pp.
- Udvardy, M. D. F. 1977. The Audubon Society field guide to North American birds: western region. A. Knopf, New York. 855pp.
- Bertrand, G. A., and J. M. Scott. 1979. Checklist of the birds of Oregon. Audubon Soc. of Corvallis. Corvallis, OR. 17pp.
- Clark, R. J. 1975. A field study of the short-eared owl, *Asio flammeus* (Pontoppidan), in North America. Wild. Monogr. No. 47. 67pp.
- Dixon, J. S., and R. M. Bond. 1937. Raptorial birds in the cliff areas of Lava Beds National Monument, California. Condor 39:97-102.
- Earhart, C. M., and N. K. Johnson. 1970. Size dimorphism and food habits of North American owls. Condor 72:251-264.
- Fisler, G. F. 1960. Changes in food habits of short-eared owls feeding in a salt marsh. Condor 62:486-487.
- Garrett, K., and J. Dunn. 1981. Birds of southern California. Los Angeles Audubon Soc. 408pp.
- Grinnell, J., and A. H. Miller. 1944. The distribution of the birds of California. Pac. Coast Avifauna No. 27. 608pp.
- Guiguet, C. J. 1960. The Birds of British Columbia (7). The owls. Brit. Col. Prov. Mus., Vancouver. Handb. No. 18. 62pp.
- Holt, D. W. 1992. Notes on short-eared owl (*Asio flammeus*) nest sites, reproduction and territory size in coastal massachusetts. Can. Field-Nat. 106: 352-356.
- Holt, D. W., and S. M. Leasure. 1996. Short-eared owl (*Asio flammeus*). The birds of North America, No. 62 (A. Poole and F. Gill, eds.) Acad. Nat. Sci., Philadelphia, PA, Am. Ornithol. Union, Washington DC.
- Hunt, R. 1918. The tragic addition of a new bird to the campus list. Condor 20:125-126.
- Johnston, R. F. 1956. Predation by short-eared owls on a salicornia salt marsh. Wilson Bull. 68:91-102.

- Karalus, K. E., and A. W. Eckert. 1974. The owls of North America. Doubleday Co., Garden City, NY. 278pp.
- Killpack, M. L. 1951. Short-eared owl eaten by horned owl. *Condor* 53:262.
- McCaskie, G., P. De Benedictis, R. Erickson, and J. Morlan. 1988. Birds of northern California, an annotated field list. 2nd ed. Golden Gate Audubon Soc., Berkeley. Reprinted with suppl. 108pp.
- McGahan, J. 1968. Ecology of the golden eagle. *Auk* 85:1-12.
- Murie, O. J. 1929. Nesting of the snowy owl. *Condor* 31:3-12.
- Murray, G. A. 1976. Geographic variation in the clutch size of seven owl species. *Auk* 93:602-613.
- Pitelka, F. A., P. Q. Tomich, and G. W. Treichel. 1955a. Breeding behavior of jaegers and owls near Barrow, Alaska. *Condor* 57:3-18.
- Pitelka, F. A., P. Q. Tomich, and G. W. Treichel. 1955b. Ecological relations of jaegers and owls as lemming predators near Barrow, Alaska. *Ecol. Monogr.* 25:85-117.
- Remsen, J. V., Jr. 1978. Bird species of special concern in California. Calif. Dep. Fish and Game, Sacramento. Wildl. Manage. Admin. Rep. No. 78-1. 54pp.
- Sooter, C. A. 1942. Habits of horned and short-eared owls. *Condor* 44:129.
- Townsend, C. W. 1937. *Buteo lagopus* S. Johannis (Gmelin): American rough-legged hawk. Pages 269-284 in A. C. Bent. Life histories of North American birds of prey. Part 1. U.S. Natl. Mus. Bull. No. 167. 409pp.
- Udvardy, M. D. F. 1977. The Audubon Society field guide to North American birds: western region. A. Knopf, New York. 855pp.
- Urner, C. A. 1923. Notes on the short-eared owl. *Auk* 40:30-36.